# Introduction

The Medical Treatment Guidelines review criteria contained herein were developed by the Office of the Medical Director in collaboration with the Washington State Medical Association Industrial Insurance Advisory Committee. These guidelines/review criteria are implemented in the prospective utilization review and claim management process. The guidelines/review criteria are published by the Department of Labor and Industries and the department is solely responsible for coverage decisions that may result from use of these guidelines/review criteria.

_____Note: *For more copies of the Medical Treatment Guidelines please write to: L&I Warehouse, Department of Labor and Industries, P.O. Box 44843, Olympia, Washington 98504-4843.*[1]

# GUIDELINE PROCESS

### Medical Practice Guidelines in Washington Workers' Compensation

**Background**

The Washington State Department of Labor and Industries (L&I) Office of the Medical Director (OMD), in collaboration with the Washington State Medical Association (WSMA) Industrial Insurance Advisory Committee, has developed a process for establishing medical treatment guidelines. Under authority of WAC 296-20-01001, the WSMA committee advises and assists L&I on issues broadly related to the quality of medical care received by injured workers. From September 1988 to 2004, the WSMA medical guideline subcommittee met on a monthly basis to address medical practice issues.

The need to establish practice guidelines was recognized by the members of the Washington State Medical Association committee in 1988, when the inpatient utilization review (UR) program was established. This program provides preadmission medical necessity review for inpatient admissions, particularly related to surgical procedures. Earlier in 1988 L&I had established and published admission criteria for the inpatient medical treatment of back pain (for those that did not require surgery). Within one year of publishing these criteria, medical back admissions for the department fell by 60 percent. Surprisingly, a statewide sentinel effect was also seen in hospital discharge data. The inpatient UR program was originally contracted to an out-of-state vendor who used proprietary surgical criteria to establish medical necessity. Although these criteria are used nationally by insurance companies, they were felt to be inadequate in detail and specificity for L&I's purpose of assuring quality.

The first OMD/WSMA medical guidelines subcommittee meeting occurred in September 1988, in response to an L&I request to assist with development of guidelines for lumbar fusion. After three to four months of meetings, the subcommittee, which included several prominent spine surgeons from the Seattle area, presented a draft of guidelines for fusion to the full OMD/WSMA committee. In 1989, L&I published the fusion guidelines. Since the publication of the medical back and fusion guidelines, 18 other guidelines have been established.

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[1]This work was done in full collaboration with the Washington State Medical Association Industrial Insurance Advisory Committee.

### The WSMA/L&I Medical Practice Guideline Process

The process used by the OMD/WSMA medical guidelines subcommittee is a combination of scientific evidence and community-based expert opinion. Although the consensus process is relatively informal, most aspects of the process for each guideline have been quite consistent, employing the following steps.

- Prioritization of guidelines
- Consensus development
- Formatting a decision-making algorithm
- Implementation
- Evaluation

## PRIORITIZATION OF GUIDELINES

For the most part, prioritization has depended on 1) frequency of the problem, 2) cost, 3) poor outcomes or, 4) weak biologic plausibility. The lumbar fusion guideline, for example, was addressed first since no proprietary criteria for fusion were available. Other surgical guidelines were addressed because they are frequently performed (e.g., back, neck and knee). Both lumbar fusion and thoracic outlet surgery are relatively infrequent, but neither has strong clinical trial support nor clear biologic plausibility.

## CONSENSUS DEVELOPMENT

Consensus development has generally taken place between the permanent members of the subcommittee (orthopedic surgeon, physiatrist, occupational medicine physician, neurologist, neurosurgeon) and *ad hoc* invited physicians who are clinical experts in the topic to be addressed. In order to reach consensus, the following assumptions are made.

1. The (surgical) guideline is meant to increase the proportion of surgical requests authorized for workers who truly require surgery, and to decrease the proportion of such authorizations among workers who do not fall within the consensus guideline.

2. The guideline is meant to be a gold standard for the majority of requests, but for the minority of workers who appear to fall outside of the guideline and whose complexity of clinical findings exceeds the specificity of the guideline, a further review by a specialty-matched physician is conducted.

3. The guideline is further refined after input from other community-based practicing physicians.

4. The guideline is evaluated to determine if it is having a beneficial effect.

5. The guideline-setting process will be iterative, that is, although initial guidelines may be quite liberally constructed, subsequent tightening of the guideline would occur as other national guidelines are set, or other scientific evidence (e.g., from outcomes research) becomes available.

Assumption number two is particularly important and warrants elaboration. The intention of the OMD/WSMA medical guidelines subcommittee was to develop treatment guidelines that would be implemented in a nonadversarial way. The subcommittee tried to distinguish between clear-cut indications for procedures and indications that were questionable. The expectation was that when surgery was requested for a patient with clear-cut indications, the request would be approved by nurse consultants. However, if such clear-cut indications were not present, the request would not be automatically denied. Instead, it would be referred to a physician consultant who would review the patient's file, discuss the case with the requesting surgeon, and make recommendations to the claims manager. The flexibility built into this decision making process was important in two ways. First, it enabled the subcommittee to develop surgical indications fairly quickly, since the members were aware that the indications would not be applied in a heavy-handed way. Second, it played a major role in legitimizing the work of the subcommittee in the eyes of practicing physicians in Washington.

## FORMATTING A DECISION MAKING ALGORITHM

Once the principles of the guideline are reached by consensus, these principles are placed in a format consisting of and/or statements intended to aid professional nurse reviewers in deciding whether a particular surgical request falls within the guideline.

## IMPLEMENTATION

It has become clear that, without a method of implementation, medical practice guidelines may be inconsistently and informally applied. Most of the surgical guidelines established by OMD/WSMA have been implemented in the context of the inpatient UR program. It has been critical in contract negotiations with UR vendors to specify that the vendor is willing to substitute OMD/WSMA-generated guidelines for less specific standards already in use by the company. In 1994, the Department of Labor and Industries initiated an outpatient UR program, and this has allowed full implementation of guidelines related to outpatient procedures (e.g., carpal tunnel surgery, MRIs).

**EVALUATION**

The Department is developing a database sufficient to provide continuous evaluation of all newly implemented guidelines. Current evaluation efforts, dependent on retrospective vendor reports, are labor intensive and are not responsive enough to emerging needs. The new database could identify both provider indicators of outlying behavior, as well as worker-based health outcomes (e.g., time loss duration post surgery).

# Review Criteria for Knee Surgery

| PROCEDURE | CONSERVATIVE CARE | Clinical Findings | | |
|---|---|---|---|---|
| | | SUBJECTIVE | OBJECTIVE | CARE |
| **ANTERIOR CRUCIATE LIGAMENT (ACL) REPAIR** | **AND** (Not required for acute injury with hemarthrosis)<br><br>Physical therapy<br>**OR**<br>Brace | **AND** Pain alone is not an indication for surgery<br><br>Instability of the knee, described as "buckling or give way"<br>**OR**<br>Significant effusion at the time of injury<br>**OR**<br>Description of injury indicates rotary twisting or hyperextension incident | **AND** Positive Lachman's sign<br>**OR**<br>Positive pivot shift<br>**OR**<br>Positive anterior drawer<br>**OR**<br>Positive KT 1000<br>>3-5 mm = +1<br>>5-7 mm = + 2<br>>7 mm = +3 | **AND** (Not required if acute effusion, hemarthrosis, and instability; or documented history of effusion, hemarthrosis, and instability)<br><br>ACL disruption on:<br><br>MRI<br>**OR**<br>Arthroscopy<br>**OR**<br>Arthrogram |
| **LATERAL RETINACULAR RELEASE**<br>**OR**<br>**PATELLAR TENDON REALIGNMENT**<br>**OR**<br>**MAQUET PROCEDURE** | **AND**<br><br>Physical therapy (not required for acute patellar dislocation with associated intra-articular fracture)<br>**OR**<br>Medications | **AND**<br><br>Knee pain with sitting<br>**OR**<br>Pain with patellar/femoral movement<br>**OR**<br>Recurrent dislocations | **AND**<br><br>Lateral tracking of the patella<br>**OR**<br>Recurrent effusion<br>**OR**<br>Patellar apprehension<br>**OR**<br>Synovitis with or without crepitus<br>**OR**<br>Increased Q angle > 15 degrees | **AND**<br><br>Abnormal patellar tilt on:<br><br>X-ray, CT, or MRI |

Reference: Provider Bulletin 03-16; Date Introduced: December 2003

| PROCEDURE | CONSERVATIVE CARE | Clinical Findings | | |
|---|---|---|---|---|
| | | SUBJECTIVE | OBJECTIVE | IMAGING |
| **KNEE JOINT REPLACEMENT**<br><br>If only **1** compartment is affected, a unicompartmental or partial replacement is indicated.<br><br>If **2** of the **3** compartments are affected, a total joint replacement is indicated. | | **AND** | **AND** | **AND** |
| | Medications<br>**OR**<br>Visco supplementation injections<br>**OR**<br>Steroid injection | Limited range of motion<br>**OR**<br>Night time joint pain<br>**OR**<br>No pain relief with conservative care | Over 50 years of age<br>**AND**<br>Body Mass Index of less than 35 | Osteoarthritis on:<br><br>Standing x-ray<br>**OR**<br>Arthroscopy |

| PROCEDURE | CONSERVATIVE CARE | SUBJECTIVE | OBJECTIVE | IMAGING |
|---|---|---|---|---|
| DIAGNOSTIC ARTHROSCOPY | | **AND** | | **AND** |
| | Medications<br>**OR**<br>Physical therapy | Pain and functional limitations continue despite conservative care | | Imaging is inconclusive |
| | | **AND** | **AND** | **AND** |
| MENISCECTOMY<br>OR<br>MENISCUS REPAIR | (Not required for locked/blocked knee)<br><br>Physical therapy<br>**OR**<br>Medication<br>**OR**<br>Activity modification | Joint pain<br>**OR**<br>Swelling<br>**OR**<br>Feeling of give way<br>**OR**<br>Locking, clicking, or popping | Positive Mc Murray's sign<br>**OR**<br>Joint line tenderness<br>**OR**<br>Effusion<br>**OR**<br>Limited range of motion<br>**OR**<br>Locking, clicking, or popping<br>**OR**<br>Crepitus | (Not required for locked/blocked knee)<br><br>Meniscal tear on MRI |

| PROCEDURE | CONSERVATIVE CARE | SUBJECTIVE | OBJECTIVE | IMAGING |
|---|---|---|---|---|
| **CHONDROPLASTY (Shaving or debridement of an articular surface)** | **AND** | **AND** | | |
| | Medication **OR** Physical therapy | Joint pain **AND** Swelling | Effusion **OR** Crepitus **OR** Limited ROM | |
| **SUBCHONDRAL DRILLING OR MICROFRACTURE** | **AND** | **AND** | **AND** | |
| | Medication **OR** Physical therapy | Joint pain **AND** Swelling | Small full thickness chondral defect on the weight bearing portion of the medial or lateral femoral condyle **AND** Knee is stable with intact, fully functional menisci and ligaments **AND** Normal knee alignment **AND** Normal joint space **AND** Ideal age 45 or younger | Chondral defect on the weight bearing portion of the medial or lateral femoral condyle on: MRI **OR** Arthroscopy |

| PROCEDURE | CONSERVATIVE CARE | SUBJECTIVE | OBJECTIVE | IMAGING |
|---|---|---|---|---|
| OSTEOCHONDRAL AUTOGRAFT (MOSAICPLASTY OR OATS PROCEDURE) | **AND** Medication **OR** Physical therapy | **AND** Joint pain **AND** Swelling | **AND** Failure of previous subchondral drilling or microfracture<br><br>Large full thickness chondral defect that measures less than 3 cm in diameter and 1 cm in bone depth on the weight bearing portion of the medial or lateral femoral condyle **AND** Knee is stable with intact, fully functional menisci and ligaments **AND** Normal knee alignment **AND** Normal joint space **AND** Body mass index of less than 35 | **AND** Chondral defect on the weight bearing portion of the medial or lateral femoral condyle on:<br><br>MRI **OR** Arthroscopy |

**Body Mass Index**

The equation for calculating the Body Mass Index (BMI) = (Weight in pounds ÷ Height in inches ÷ Height in inches) x 703. For example, a person weighing 210 pounds and 6 feet tall would have a BMI of (210 pounds ÷ 72 inches ÷ 72 inches) x 703 = 28.5.

| PROCEDURE | CONSERVATIVE CARE | SUBJECTIVE | OBJECTIVE | IMAGING |
|---|---|---|---|---|
| **AUTOLOGOUS CHONDROCYTE IMPLANTATION (ACI)** | **AND** Physical therapy for a minimum of 2 months | **AND** IW is capable and willing to follow the rehabilitation protocol. | **AND** Failure of traditional surgical interventions (i.e., microfracture, drilling, abrasion, osteochondral graft). Debridement alone does not constitute a traditional surgical intervention for ACI **AND** Single, clinically significant, lesion that measures between 1 to 10 sq.cm in area that affects a weight-bearing surface of the medial femoral condyle or the lateral femoral condyle. **AND** Full-thickness lesion (Modified Outerbridge Grade III-IV) that involves only cartilage. **AND** Knee is stable with intact, fully functional menisci and ligaments. **AND** Normal knee alignment **AND** Normal joint space. **AND** IW is less than 60 years old **AND** Body Mass Index of less than 35. | **AND** Chondral defect on the weight bearing surface of the medial or lateral femoral condyle on: MRI **OR** Arthroscopy |

**ACI EXCLUSION CRITERIA**

ACI is not a covered procedure in **any** of the following circumstances:

- Lesion that involves any portion of the patellofemoral articular cartilage, bone, or is due to osteochondritis dissecans.
- A "kissing lesion" or Modified Outerbridge Grade II, III, or IV exists on the **opposite** tibial surface.
- Mild to severe localized or diffuse arthritic condition that appears on standing x-ray as joint space narrowing, osteophytes, or changes in the underlying bone.
- Unhealthy cartilage border; the synovial membrane in the joint may be used as a substitute border for up to ¼ of the total circumference.
- Prior total meniscectomy of either compartment in the affected knee. Must have at least 1/3 of the posterior meniscal rim.
- History of anaphylaxis to gentamycin or sensitivity to materials of bovine origin.
- Chondrocalcinosis is diagnosed during the cell culture process.

**Modified Outerbridge Classification**

| | |
|---|---|
| I | Articular cartilage softening |
| II | Chondral fissures or fibrillation < 1.25 cm in diameter |
| III | Chondral fibrillation > 1.25 cm in diameter, ("crabmeat changes") |
| IV | Exposed subchondral bone |

**Please refer to Provider Bulletin 03-02 for additional coverage information**. Surgeon should have performed or assisted in 5 or more ACI procedures; or will be performing the ACI under the direct supervision and control of a surgeon who has experience with 5 ACI procedures.

**INCLUSION CRITERIA**

| PROCEDURE | CONSERVATIVE CARE | SUBJECTIVE | OBJECTIVE | IMAGING |
|---|---|---|---|---|
| MENISCAL ALLOGRAFT TRANSPLANTATION | **AND** | **AND** | **AND** | |
| | Physical therapy<br>**OR**<br>NSAID<br>**OR**<br>Activity modification | Capable and willing to follow the rehabilitation protocol.<br>**AND**<br>Knee pain that has not responded to conservative treatment. | Previous meniscectomy with at least two-thirds of the meniscus removed.<br>**AND**<br>If Modified Outerbridge Scale Grade III then debridement must first produce an articular surface sufficiently free of irregularities to maintain the integrity of the transplanted meniscus.<br>**AND**<br>Stable knee with intact ligaments, normal alignment, and normal joint space.<br>**AND**<br>Ideal age 20-45 years (too young for total knee)<br>**AND**<br>Body Mass Index of less than 35 | Articular cartilage in the affected compartment demonstrates a chondrosis classified by the Modified Outerbridge Scale as Grade I, Grade II, or Grade III. |

**MENISCAL ALLOGRAFT TRANSPLANTATION EXCLUSION CRITERIA**

Meniscal Allograft Transplantation is not a covered procedure in **any** of the following circumstances:

- Mild to severe localized or diffuse arthritic condition that appears on standing x-ray as joint space narrowing, osteophytes, or changes in the underlying bone.
- Articular cartilage in the affected compartment demonstrates a chondrosis classified by the Modified Outerbridge Scale as Grade III that has not undergone debridement; Grade III with debridement that has not produced an articular surface that can maintain the integrity of the transplanted meniscus; or Grade IV.

**Please refer to Provider Bulletin 03-02 for additional coverage information**. Surgeon should have performed or assisted in 5 or more meniscal allograft transplantation procedures; or will be performing the meniscal allograft transplantation under the direct supervision and control of a surgeon who has experience with 5 procedures.

**Modified Outerbridge Classification**

| | |
|---|---|
| I | Articular cartilage softening |
| II | Chondral fissures or fibrillation < 1.25 cm in diameter |
| III | Chondral fibrillation > 1.25 cm in diameter, ("crabmeat changes") |
| IV | Exposed subchondral bone |

**Body Mass Index**

**The equation for calculating the Body Mass Index (BMI) = (Weight in pounds ÷ Height in inches ÷ Height in inches) x 703. For example, a person weighing 210 pounds and 6 feet tall would have a BMI of (210 pounds ÷ 72 inches ÷ 72 inches) x 703 = 28.5**